Amendments

In the Claims:

Please substitute claims 47-76 provided below, for claims 47-76 of the application as previously presented. A marked-up version of claims 47-76, which shows all of the changes that have been made to the claims, is submitted herewith with additions double underlined and deletions shown in ~~strikethrough text~~.

47. (Amended) A device, comprising:

a touchpad sensor configured to detect a position and motion of an object in an x-y plane, said touchpad sensor further configured to detect a degree of force applied to said touchpad sensor in a z-direction and to output at least one sensor signal, the sensor signal being based on the position of the object, the motion of the object and the detected degree of force; and

at least one actuator coupled to and spaced apart from said touchpad sensor, said actuator configured to receive a feedback signal from the computer and generate haptic feedback based on the feedback signal, the feedback signal being correlated with the sensor signal.

48. (Amended) The device of claim 47, wherein a magnitude of the haptic feedback is proportional to the detected degree of force.

49. (Amended) The device of claim 48, wherein the haptic feedback is configured to simulate friction in the x-y plane.

50. (Amended) The device of claim 48, wherein the haptic feedback is based on data values associated with a graphical representation of a pen drawing object on a graphical display.

51. (Amended) The device of claim 47, wherein said sensor signal is further based on a velocity of the object in the x-y plane.

52.   (Amended)   The device of claim 51, wherein the haptic feedback is a texture sensation.

53.   (Amended)   The device of claim 52, wherein the texture sensation is modulated as a function of the detected degree of force in the z-direction and the velocity in the x-y plane.

54.   (Amended)   The device of claim 47, wherein the actuator is configured to generate the haptic feedback if the detected degree of force exceeds a predetermined level.

55.   (Amended)   The device of claim 47, wherein the detected degree of force is operative to control an indexing function of said device.

56.   (Amended)   The device of claim 47, wherein said touchpad sensor is configured to detect a contact location of a pointer member, the pointer member being associated with the object.

57.   (Amended)   The device of claim 47, further comprising a linkage mechanism configured to couple the object to said actuator, said linkage mechanism being configured to allow motion of the object in the x-y plane.
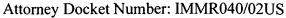
58.   (Amended)   The device of claim 47, wherein the object is one of a mouse and a stylus.

59.   (Amended)   The device of claim 47, wherein said touchpad sensor is a planar photo diode.

60. (Amended) A device, comprising:

an object movable in an x-y plane, the object being associated with a graphical representation of a cursor;

a touchpad sensor spaced apart from the object, the touchpad sensor configured to detect motion of said object in the x-y plane, the touchpad sensor further configured to detect a degree of force applied to said touchpad sensor in a z-direction; and

at least one actuator configured to provide haptic feedback to the object, the actuator being controlled based the detected degree of force applied to said touchpad sensor.

61. (Amended) The device of 60, further comprising a control processor configured to send a control signal to said actuator to generate the haptic feedback, the control signal being based on at least the detected degree of force applied to said touchpad sensor.

62. (Amended) The device of claim 60, wherein the haptic feedback is provided in the x-y plane of the object, the haptic feedback being configured to include a damping sensation, a magnitude of the damping sensation being based on at least the detected degree of force applied to said touchpad sensor.

63. (Amended) The device of claim 62, wherein the damping sensation is proportional to the detected degree of force applied to said touchpad sensor.

64. (Amended) The device of claim 60, wherein the haptic feedback includes a friction sensation, a magnitude of the friction sensation being based on at least the detected degree of force applied to said touchpad sensor.

65. (Amended) The device of claim 64, wherein the friction sensation is proportional to the detected degree of force applied to said touchpad sensor.

66. (Amended) The device of claim 60, wherein the haptic feedback is a texture sensation, a magnitude of the texture sensation being based on at least the detected degree of force applied to said touchpad sensor.

67. (Amended) The device of claim 66, wherein the texture sensation is proportional to the detected degree of force applied to said touchpad sensor.

68. (Amended) The device of claim 60, wherein said object is a mouse, and the detected degree of force applied to said touchpad sensor is proportional to an external force received at a top surface of the mouse.

69. (Amended) The device of claim 60, wherein said object is a stylus, and the detected degree of force applied to said touchpad sensor is proportional to an external force received by the stylus.

70. (Amended) The device of claim 61, wherein said control processor is configured to send the control signal when the detected degree of force is at a predetermined level.

71. (Amended) A method, comprising:

detecting a position and a motion of an object in an x-y plane using a touchpad sensor;

detecting with the touchpad sensor a degree of force applied to the touchpad sensor in a z-direction;

receiving a feedback signal from a computer, the feedback signal being based on data values associated with a position of a graphical representation of a cursor controllable by the object; and

outputting haptic feedback to the object via an actuator, the actuator being coupled to and spaced apart from the touchpad sensor, the actuator configured to output haptic feedback correlated with the feedback signal.